*** NETANSWERS INTERNET EXTRA ***
*** Number 63: On the Lookout for Little Green Men ***

If you were to hop in your time machine and read issue 36 of NetAnswers Internet Extra the day it came out... well, that would be silly, because all of the past issues are still available in file library 11 of Compuserve's Internet New Users Forum (GO INETNEW).

Anyway, issue 36 was about distributed computing, a nerdy but fun way to put your computer's spare time to good use. Distributed computing means breaking a huge computational task -- like finding big prime numbers or calculating the quadrillionth bit of pi -- into small parts and delegating work to different computers. All of the work on these projects is distributed via the Internet.

The newest distributed computing project is also the most interesting, and easily the most far-fetched, idea. The project is called SETI@Home, and its goal is to examine signals coming from space for signs of alien intelligence. SETI stands for Search for Extraterrestrial Intelligence, which you already knew if you've seen the Jody Foster movie "Contact."

You can participate by running a program that analyzes data from powerful radio telescopes at the Arecibo Radio Observatory. The program downloads a chunk of data from the Internet, then examines the data for anything that might signify something other than random space noise. The program runs as a screensaver, so it only ties up your computer when you're not using it. (It's a rather pretty screensaver at that, displaying colorful graphs of the radio data it is analyzing. If you're interested in such technical details, the SETI@Home Web site includes a description of what the numbers and graphs mean. Or you can be like me and just enjoy the pretty colors.)

As the SETI@Home Web page puts it, "there's a small but captivating possibility that your computer will detect the faint murmur of a civilization beyond Earth." It's a two-year project, during which the skies above Arecibo Radio Observatory will be completely scanned three times. Granted, the chances of finding E.T. or Mork or -- pick your favorite alien -- are infinitesimal. Perhaps the journey is its own reward.

Other distributed computing projects have succeeded in their various goals: distributed.net has managed to crack three difficult encrypted messages. The math nerds at PiHex figured out that the forty trillionth bit of pi is zero. And the Great Internet Mersenne Prime Search has discovered four prime numbers. So, by harnessing the power of thousands of otherwise idle computers, SETI@home may just have a chance at finding some little green men and women. (A list of distributed computing projects is at http://www.mersenne.org.)

The SETI@Home software is available for Windows 95/98/NT, Macintosh, and some Unix systems. For Windows, you'll need at least 32 MB of RAM, the ability to display 8-bit graphics in 800x600 resolution, 10 MB of disk space, and an Internet connection. For Macintosh systems, you'll need the above as well as a PowerPC processor and Mac OS 7.5.5 or later. A dialup Internet connection is fine -- most of SETI@home's work is done offline. It only needs to connect to the Internet to send and receive data, which occurs once every few days and takes just a few minutes.

The project's Web site offers a variety of interesting information, including a FAQ that answers many questions about the project and the software, statistics about the most significant results detected by the project, and stats about the work done by SETI@home participants.

=*=*= RELEVANT WEB SITES =*=*=

SETI@Home: http://setiathome.ssl.berkeley.edu

distributed.net: http://www.distributed.net

PiHex: http://www.cecm.sfu.ca/projects/pihex/pihex.html

Great Internet Mersenne Prime Search: http://www.mersenne.org/prime.htm

List of distributed computing projects: http://www.mersenne.org

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The NetAnswers Internet Extra is free to all CompuServe members. It's available in the Internet New Users Forum (GO INETNEW) in file library 11, "NetAnswers".

Got comments or ideas for future issues? We want to hear 'em. Just send a message to savetz@compuserve.com (74774,2725).

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